

**CO-CHANNEL WIRELESS COMMUNICATION METHODS AND SYSTEMS  
USING NONSYMMETRICAL ALPHABETS**

**Abstract of the Disclosure**

Wireless communications are transmitted from at least two radioterminals to a base station co-channel over a return link using a return link alphabet. Wireless communications are also transmitted from the base station to the at least two  
5 radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet. The co-channel signals are deciphered at the receiver, while the radioterminals can use a smaller return link alphabet, which can reduce the power dissipation at the radioterminals.

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